

InStruc® PA612GF43

Americhem - Polyamide 612

General Information

Product Description

43% GLASS FIBER REINFORCED NYLON 6/12

General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> • Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Carbon Fiber, 43% Filler by Weight
Features	<ul style="list-style-type: none"> • Filled • Good Dimensional Stability • High Stiffness • High Strength
Uses	<ul style="list-style-type: none"> • Closures • Consumer Applications • Electrical/Electronic Applications • Engineering Parts • Household Goods • Housings • Industrial Applications • Industrial Parts • Office Automation Equipment • Outdoor Applications • Window & Door Components
Forms	• Pellets
Processing Method	• Injection Molding

 Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.43		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3 to 2.5E-3	in/in	ASTM D955
Water Absorption (Equilibrium)	0.080	%	ASTM D570
Mechanical			
Tensile Modulus	1.60E+6	psi	ASTM D638
Tensile Strength	27500	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	1.45E+6	psi	ASTM D790
Flexural Strength	38500	psi	ASTM D790
Impact			
Notched Izod Impact	3.0	ft·lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	390	°F	ASTM D648

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	175	°F
Drying Time	4.0	hr
Processing (Melt) Temp	510 to 530	°F
Mold Temperature	200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.
